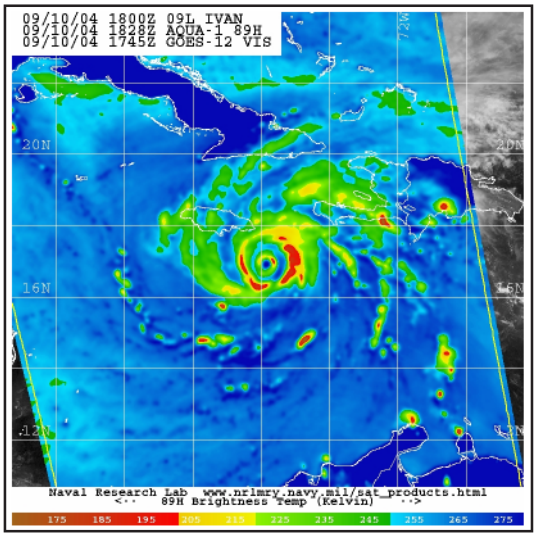
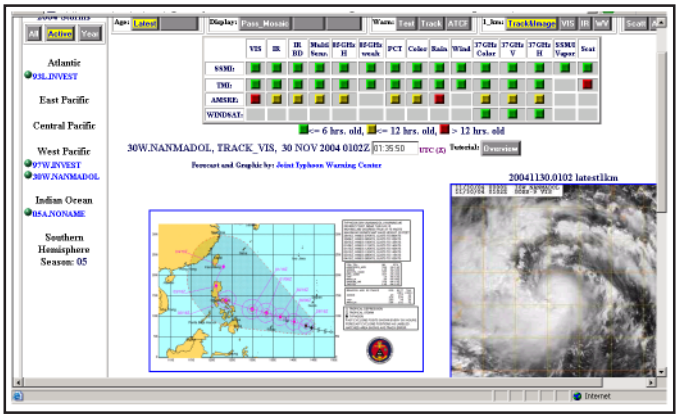
MONITORING TROPICAL CYCLONES





www.nrlmry.navy.mil/tc_pages/tc_home.html

The Naval Research Laboratory (NRL) has developed a suite of satellite products that enable around-the-clock monitoring of tropical cyclone (TC) position and structure. Highlights include the first use of passive microwave sensors that "see through" non-raining upper-level clouds to permit the determination of a storm's location and rainband/eyewall organization with improved accuracy over standard visible/Infrared (vis/IR) imagery. The combination of multi-sensor data permits more accurate TC real-time warnings and new understanding into storm intensity changes and dynamics.

Advantages/Features Include:

- Monitors any "active" tropical cyclone around the globe via one user-friendly Internet accessible web page.
- Combines near real-time digital data streams from twenty plus (20+) polar orbiter and geostationary sensors.
- Provides users with visible, Infrared and passive/active microwave data sets.
- Highlights unique passive microwave data "seeing through" upper-level clouds that obscure traditional vis/IR imagery.
- Benefits both operational and research communities.

Applications Include:

- Determining tropical cyclone location via multi-sensor data sets.
- Inferring tropical cyclone intensity via storm structure, rainband organization and eyewall configuration.
- Mapping TC eyewall replacement cycles in near real-time.
- Posting current TC warning and forecast storm information.
- Retrieving historical data on storms around the globe.

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